HITACHI
SERVICE MANUAL

YK | **No.806E**

CT1324/CT1326
CT13X6

This service manual shows only essential items.
Our complete service manual including "alignment procedure", "trouble shooting" and "technical information" are issued by manual No. 820.

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CAUTION: Before servicing this chassis, it is important that the service technician read the "Safety Precaution" and "Product Safety Notices" in this Service Manual.

SPECIFICATIONS

ANTENNA INPUT IMPEDANCE ..... 300Ω and 75Ω
TELEVISION R-F FREQUENCY RANGE
All 12 VHF Channels ..... 54MHz to 88MHz
174MHz to 216MHz
All 70 UHF Channels ..... 470MHz to 890MHz
INTERMEIDATE FREQUENCIES
Picture I-F Carrier Frequency 45.75MHz
Sound I-F Carrier Frequency 41.25MHz
Sound I-F Frequency 4.5MHz
Color Sub-Carrier Frequency 3.58MHz
POWER INPUT ..... 120 V, 60 Hz

POWER RATING 76W
CONVERGENCE ..... Self convergence
FOCUS ..... Electrostatic
PICTURE TUBE 370HRB22
SOUND OUTPUT 1W, 400Hz
SPEAKER 7.7cm, 8Ω
DIMENSIONS (W) ..... 43.6 cm
(H) ..... 34.1 cm
(D) ..... 37.8 cm
WEIGHT ..... appr. 12kg

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

SOLID STATE COLOR TELEVISION

April 1982 **YOKOHAMA WORKS**

SAFETY PRECAUTIONS

NOTICE: Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

WARNING: Since the chassis of this receiver is connected to one side of AC power supply during operation, whenever the receiver is plugged in, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of receiver.

The following precautions should be observed:

1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep picture tube away from the body while handling.
2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on a "HOT" chassis receiver.
3. When replacing a chassis in the receiver, all the protective devices must be put back in place, such as barriers, non-metallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
4. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the receiver by the manufacturer has become defective, or inadvertently defeated during servicing.

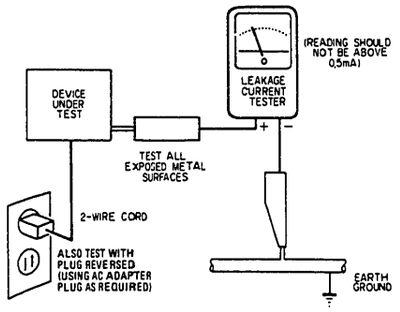
Therefore, the following checks should be performed for the continued protection of the customer and service technician.

Leakage Current Cold Check

With the AC plug removed from the AC120V, 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3MΩ and a maximum resistor reading of 5MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into a AC120V, 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on. Using a "leakage Current Tester (Simpson Model 229 equvalent)", Measure for current from all exposed metal parts of the cabinet (antennas, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.


(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE RECEIVER TO THE CUSTOMER.

High Voltage

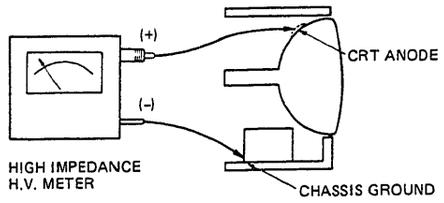
This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit may correctly be operated.

Serviceman warning

With minimum Brightness and Picture, operating high voltage in this receiver is lower than 27.0KV. In case any component having influence on high voltage is replaced, confirm that high voltage with minimum Brightness and Picture is lower than 27.0KV.

To measure H.V. use a high impedance H.V. meter. Connect (—) to chassis earth and (+) to the CRT anode button. (See the following connection diagram).

NOTE: Turn power switch off without fail before the connection with Anode button is made.



X-radiation

TUBE: The primary source of X radiation in this receiver is the picture tube. The tube utilized for the above mentioned function in this chassis is specially constructed to limit X radiation emissions.

For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

When trouble shooting and making test measurements in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage component.

Do not operate the chassis longer than is necessary to locate the cause excessive voltage.

PRODUCT SAFETY NOTICE

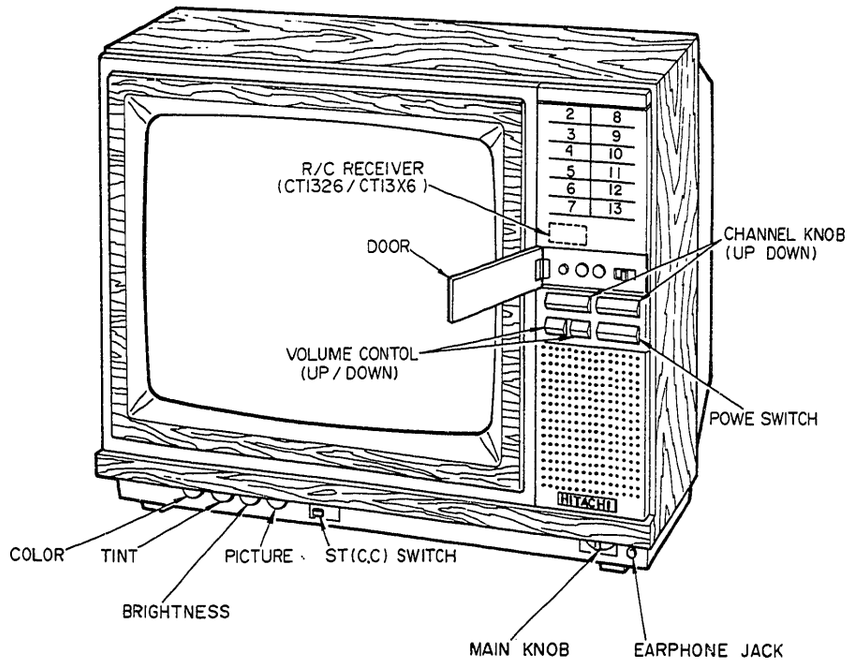
Many electrical and mechanical parts in HITACHI television receiver have special safetyrelated characteristics. These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by making with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of, HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.

CONTROLS



TECHNICAL CAUTIONS

[CHECK OF HIGH VOLTAGE HOLD DOWN CIRCUIT]

Checking of the high voltage hold down circuit operation

1. Turn the switch of the set OFF.
2. Connect a high voltage voltmeter between the CRT anode and the anode of D701 as shown in Fig. 1.
3. Short R915 using a shorting lead wire as shown in Fig. 2.
4. Set Brightness/Picture controls to max.
5. Turn the switch of the set ON after setting the AC input voltage to 0V, and then gradually increase the AC input voltage and check that the picture disappears when the high voltage is less than 29.0KV.
6. Turn the switch of the set OFF immediately after checking that the picture disappears.
7. Remove the adjusting jig and the voltmeter.

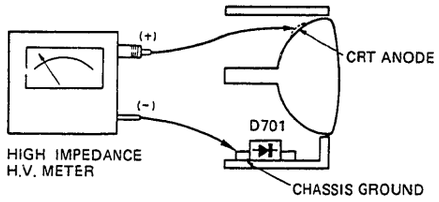


Fig. 1 Connection of H.V. Meter

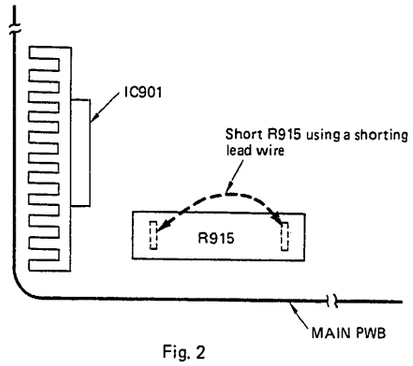
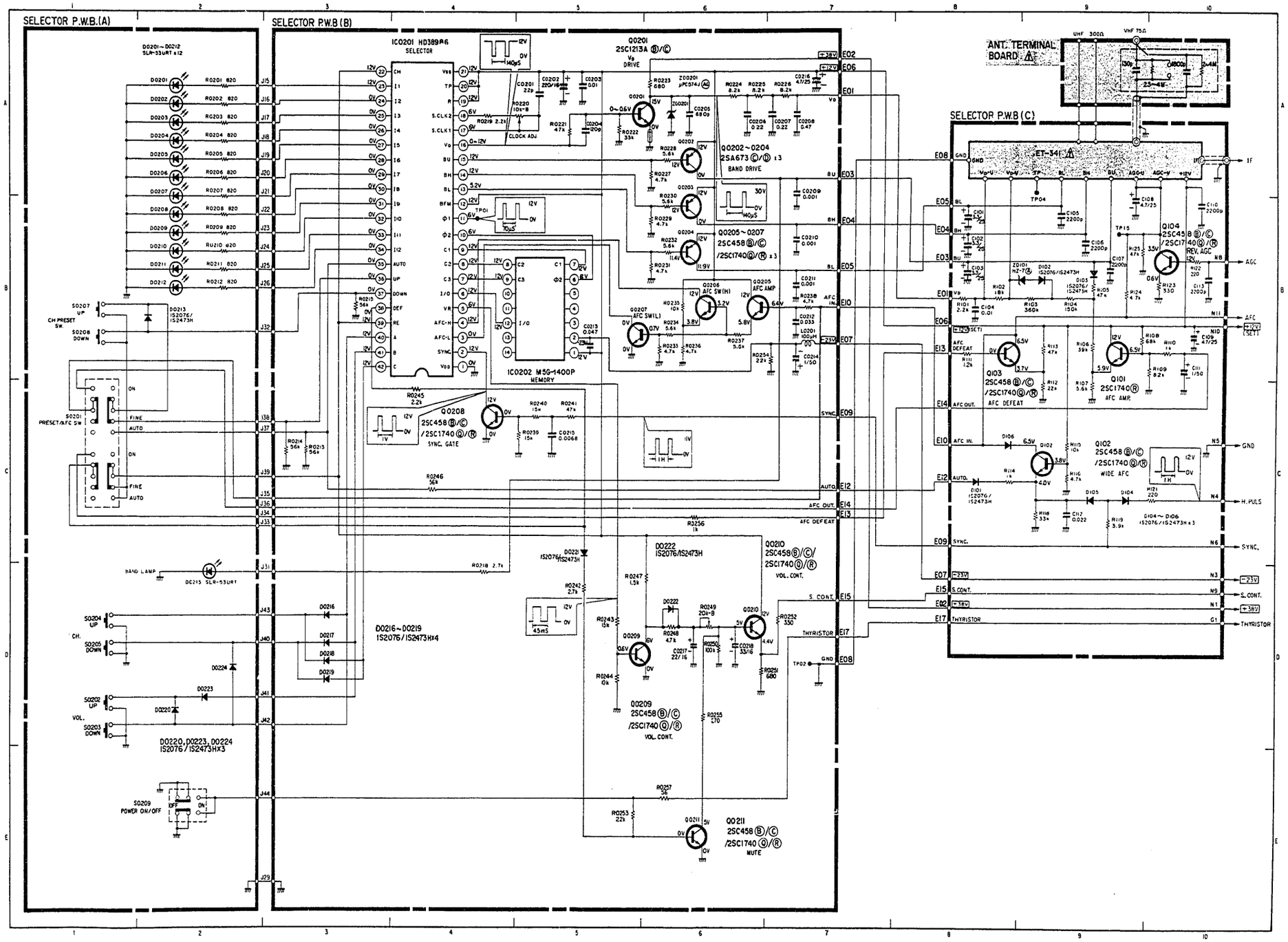


Fig. 2

PROGRAM SELECTOR CIRCUIT DIAGRAM (CT1324)

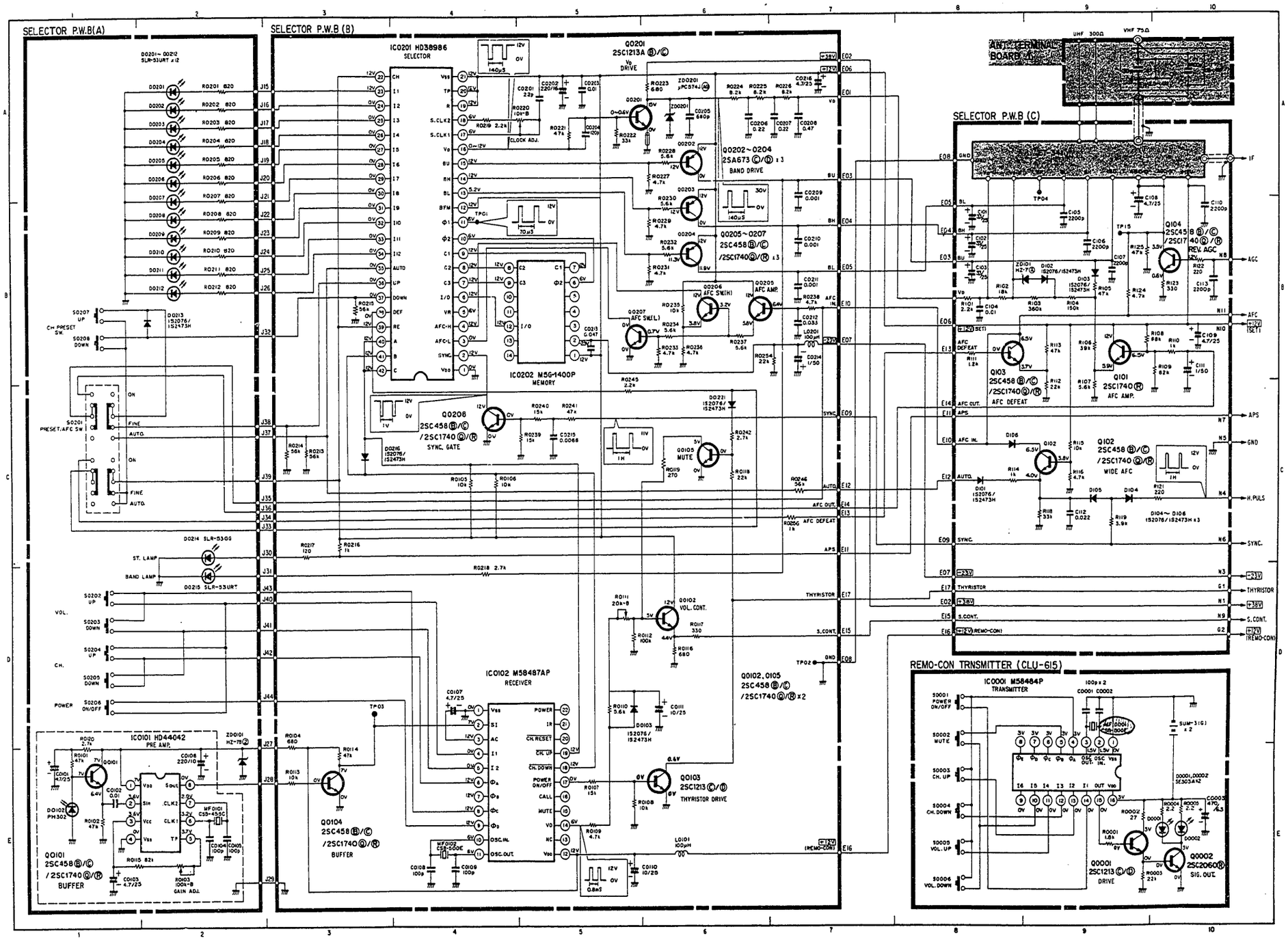
PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver though improper servicing.



- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
- All DC voltage to be measured with a tester (100kΩ/V).
  Voltage taken on a complex color bar signal including a standard color bar signal.

PROGRAM SELECTOR CIRCUIT DIAGRAM (CT1326/CT13X6)

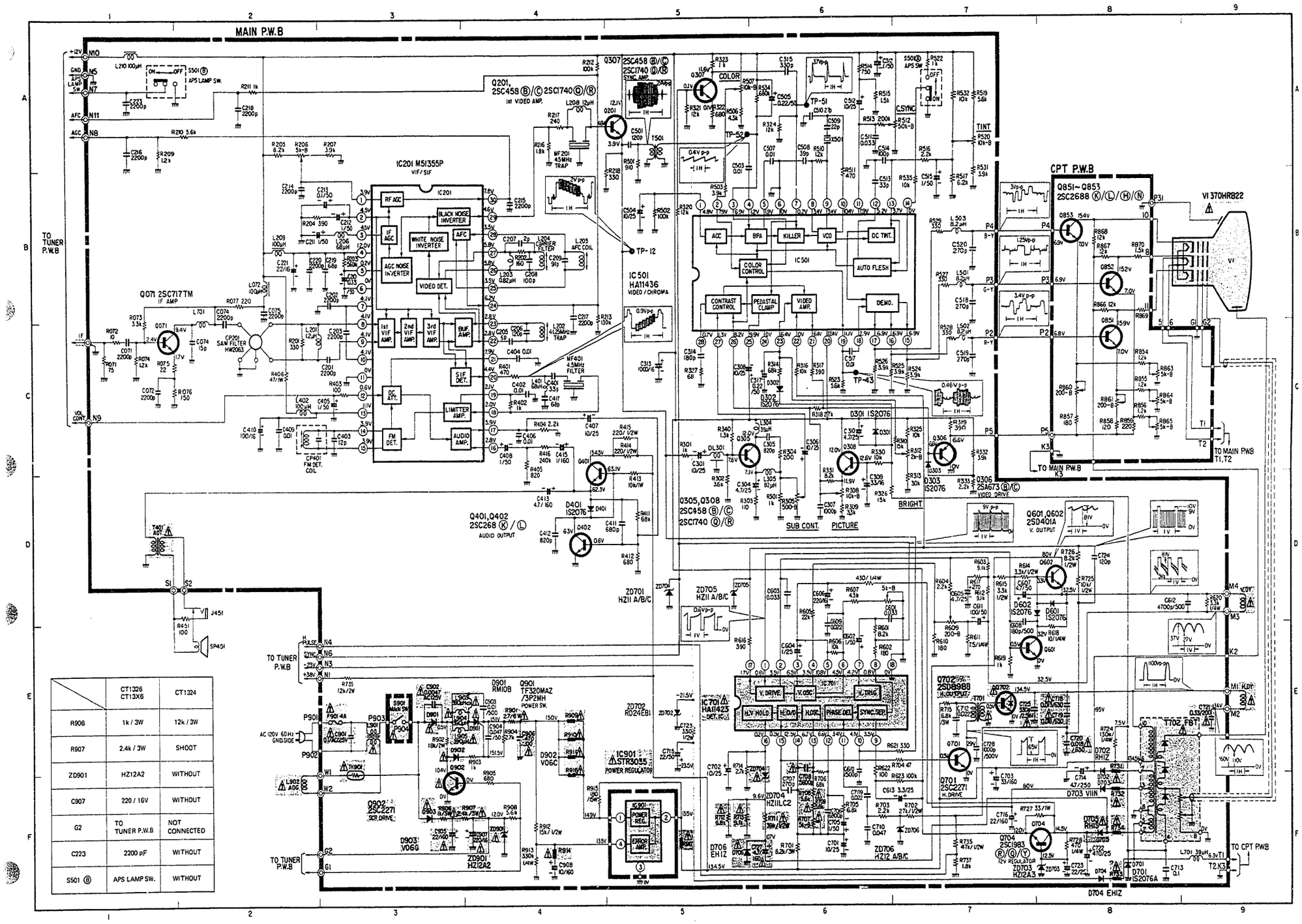
PRODUCT SAFETY NOTE: Components marked with a △ and shaded have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver though improper servicing.



- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
- All DC voltage to be measured with a tester (100kΩ/V).
  Voltage taken on a complex color bar signal including a standard color bar signal.

PRODUCT SAFETY NOTE: Components marked with a ⚠ and shaded have special characteristics important to safety. Before replacing any of these components read carefully the product safety notice of this service manual. Don't degrade the safety of the receiver through improper servicing.

BASIC CIRCUIT DIAGRAM (CT1324/CT1326/CT13X6)



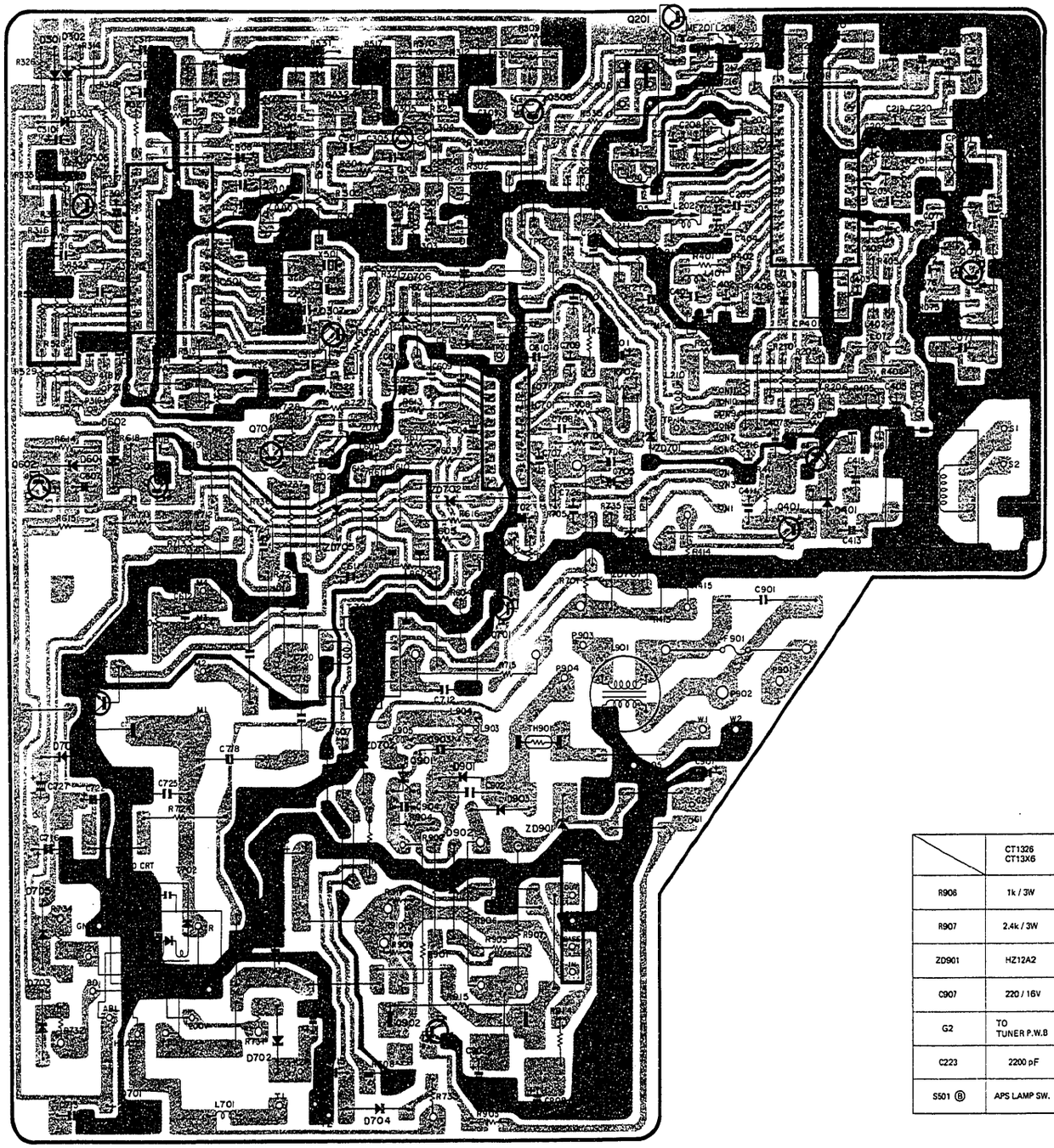
	CT1326 CT13X6	CT1324
R906	1k / 3W	12k / 3W
R907	2.4k / 3W	SHOOT
ZD901	HZ12A2	WITHOUT
C907	220 / 16V	WITHOUT
G2	TO TUNER P.W.B	NOT CONNECTED
C223	2200 pF	WITHOUT
S501 (B)	APS LAMP SW.	WITHOUT

- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
- All DC voltage to be measured with a tester (100KΩ/V).
  Voltage taken on a complex color bar signal including a standard color bar signal.

PRINTED WIRING BOARD

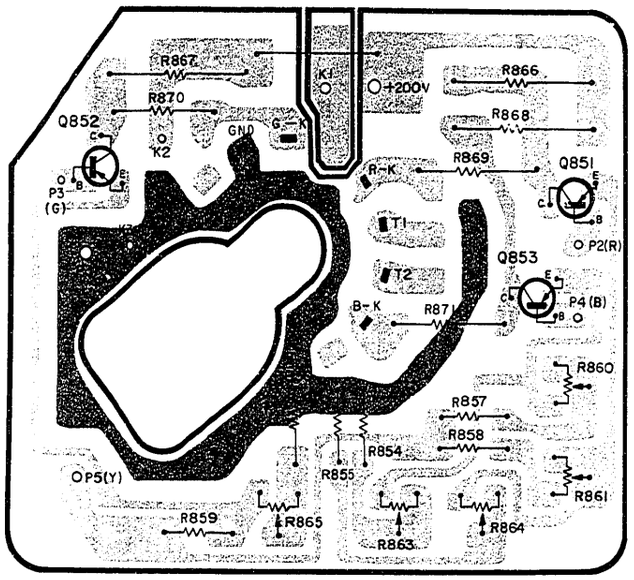
... +B PATTERN
... SIGNAL PATTERN
... GROUND PATTERN

MAIN P.W. BOARD

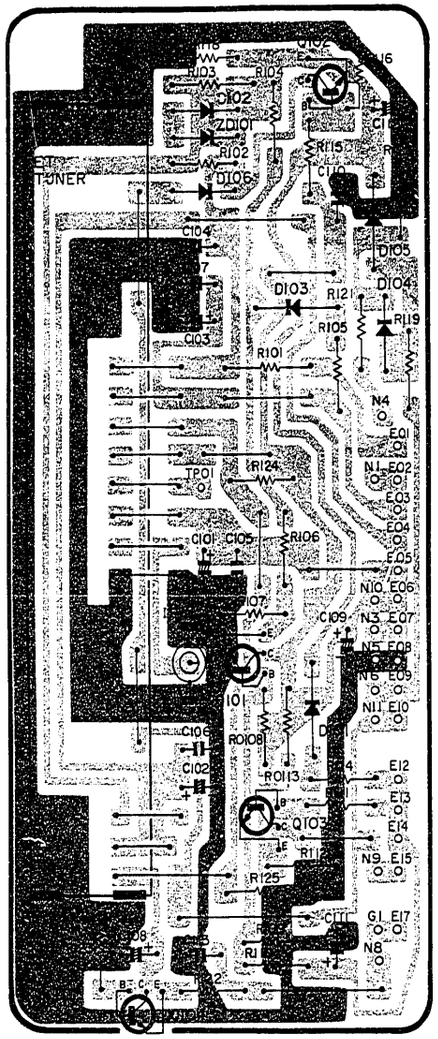


	CT1326 CT13X6	CT1324
R906	1k / 3W	12k / 3W
R907	2.4k / 3W	SHOOT
ZD901	HZ12A2	WITHOUT
C907	220 / 16V	WITHOUT
G2	TO TUNER P.W.B	NOT CONNECTED
C223	2200 pF	WITHOUT
S501 Ⓑ	APS LAMP SW.	WITHOUT

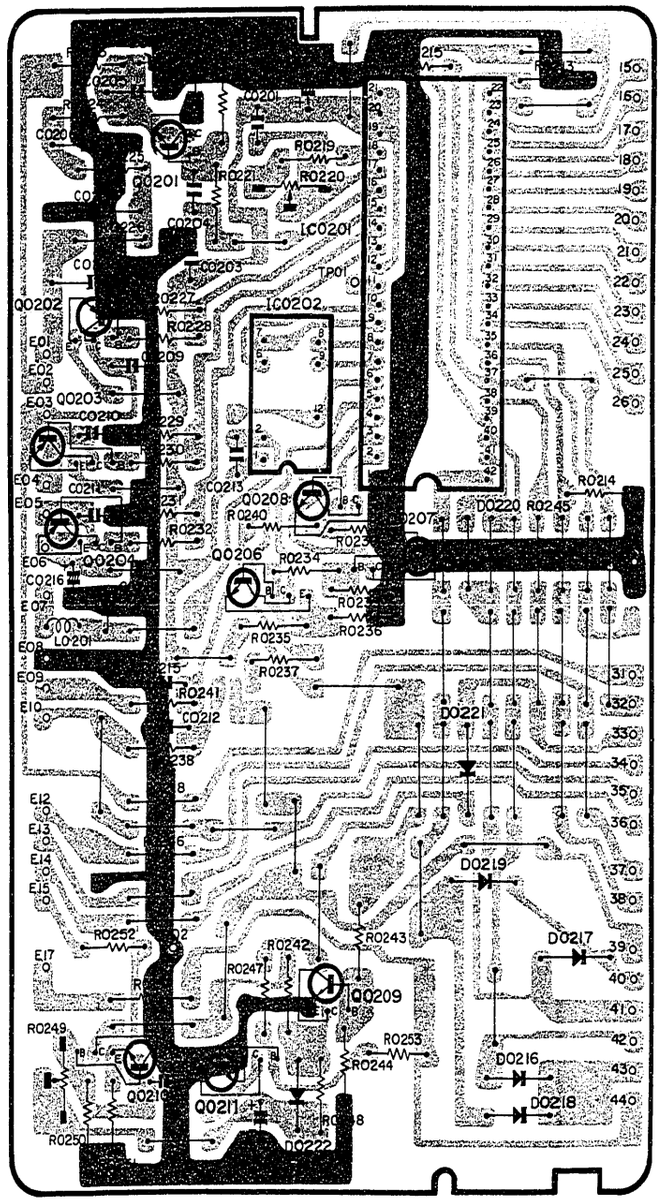
C.R.T P.W. BOARD


R867
K1
+200V
R866
R870
Q852
GND
G-K
K2
R868
R869
R-K
Q851
P3
(G)
T1
P2(R)
T2
Q853
P4 (B)
B-K
R87
R860
R857
R858
R854
R855
P5(Y)
R861
R859
R865
R863
R864

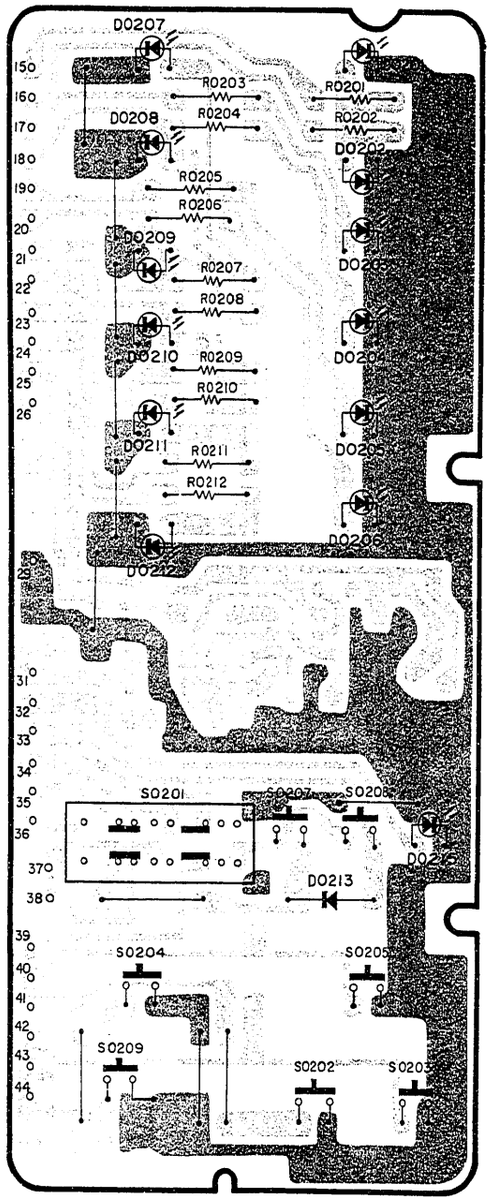
SELECTOR P.W.BOARD (C) (CT1324)



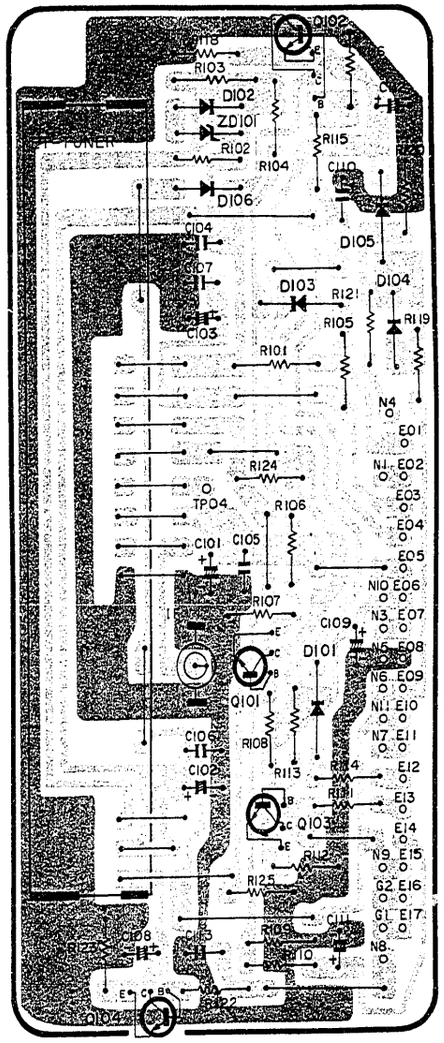
SELECTOR P.W.BOARD (B) (CT1324)



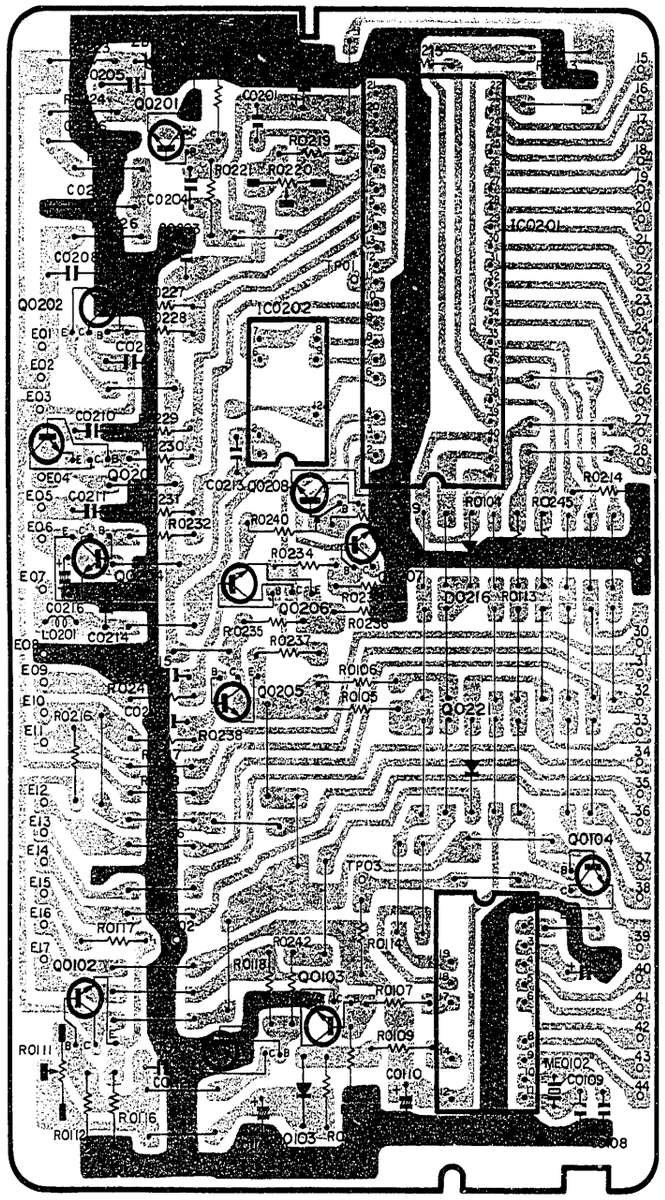
SELECTOR P.W.BOARD (A) (CT1324)



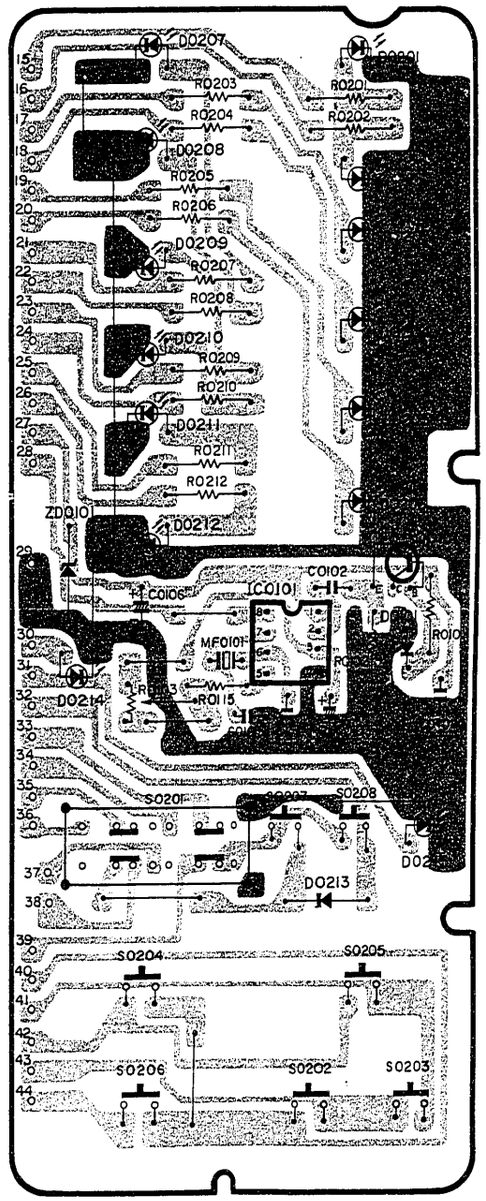
SELECTOR P.W.BOARD (C) (CT1326/CT13X6)



SELECTOR P.W.BOARD (B) (CT1326/CT13X6)

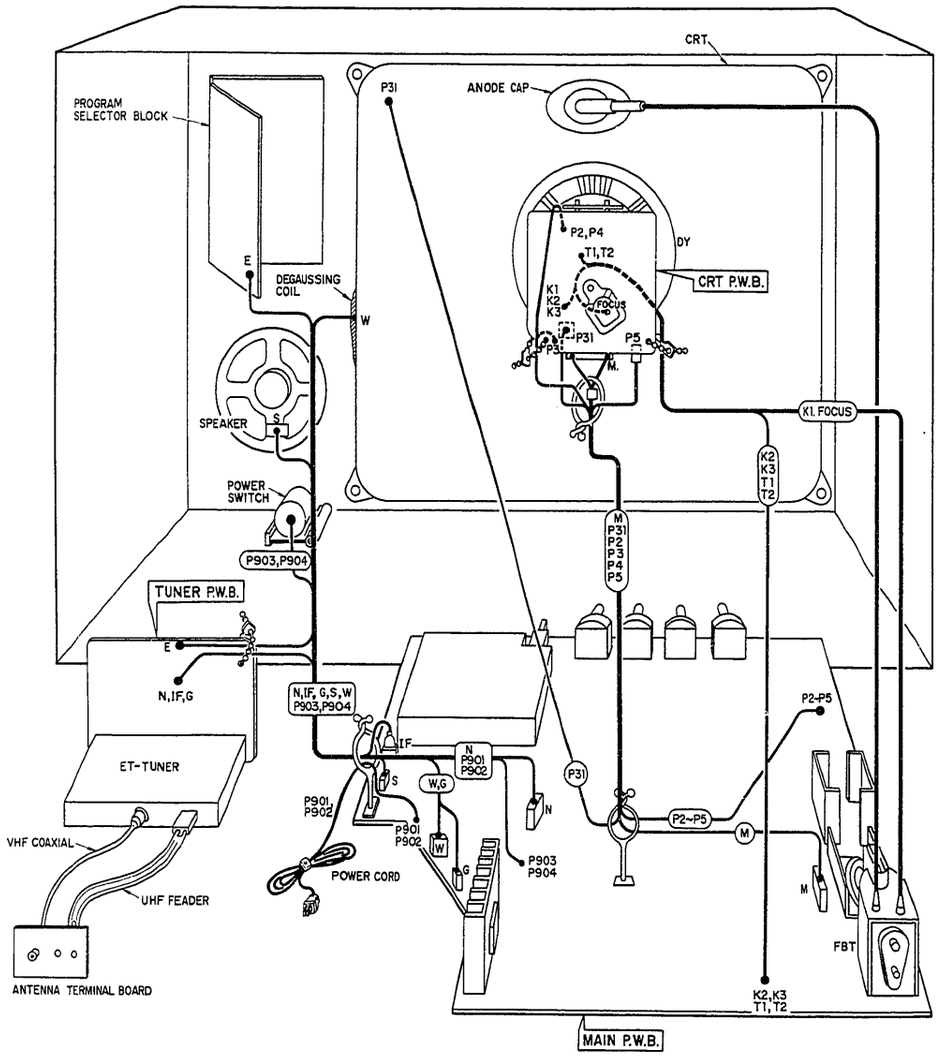


SELECTOR P.W.BOARD (A) (CT1326/CT13X6)



WIRING DIAGRAM

CT1324/CT1326/CT13X6



REPLACEMENT PARTS LIST

PRODUCT SAFETY NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

ABBREVIATIONS: Capacitors . . . . . CD: Ceramic disk, PF: Polyester film, EL: Electrolytic. PP: Polypropylene, PR: Paper.
Resistors . . . . . CF: Carbon film, CC: Carbon composition, OMF: Metal oxide film. VR: Variable resistor, WW: Wire would, FR: Fuse resistor.
[All CD, PF and PP capacitors are ±5%, 50V and all resistors, ±5%, ¼W unless otherwise noted.]

SYMBOL NO.	PARTS NO.	DESCRIPTION
CAPACITORS		
C071	0244105	CD, 2200pF, ±10%
C072	0244105	CD, 2200pF, ±10%
C073	0246444	CD, 15pF
C074	0244105	CD, 2200pF, ±10%
C075	0244105	CD, 2200pF, ±10%
C101	0252613	EL, 3.3mfd, 25V
C102	0252613	EL, 3.3mfd, 25V
C103	0252613	EL, 3.3mfd, 25V
C104	0277013	PF, 0.01mfd, ±10%
C105	0244105	CD, 2200pF, ±10%
C106	0244105	CD, 2200pF, ±10%
C107	0244105	CD, 2200pF, ±10%
C108	0252522	EL, 20mfd, 15V
C109	0252615	EL, 4.7mfd, 25V
C110	0244105	CD, 2200pF, ±10%
C111	0252811	EL, 1mfd, 50V
C112	0277017	PF, 0.022mfd, ±10%
C113	0244105	CD, 2200pF, ±10%
C201	0244105	CD, 2200pF, ±10%
C202	0244105	CD, 2200pF, ±10%
C203	0244105	CD, 2200pF, ±10%
C205	0246415	CD, 5pF, ±0.25pF
C206	0246466	CD, 120pF
C207	0246412	CD, 2pF
C208	0246464	CD, 100pF
C209	0246463	CD, 91pF
C210	0252807	EL, 0.33mfd, 50V
C211	0252811	EL, 1mfd, 50V
C212	0252811	EL, 1mfd, 50V
C213	0252805	EL, 0.1mfd, 50V
C214	0244105	CD, 2200pF, ±10%
C215	0244105	CD, 2200pF, ±10%
C216	0244105	CD, 2200pF, ±10%
C217	0244105	CD, 2200pF, ±10%
C218	0244105	CD, 2200pF, ±10%
C219	0248680	CD, 68pF
C220	0244105	CD, 2200pF, ±10%
C221	0252522	EL, 20mfd, 15V
C222	0244139	CD, 1000pF, ±10%
C223	0244105	CD, 2200pF, ±10%
C301	0252621	EL, 10mfd, 25V
C304	0252615	EL, 4.7mfd, 25V
C305	0244120	CD, 820pF, ±10%
C306	0252621	EL, 10mfd, 25V
C307	0244139	CD, 1000pF, ±10%
C308	0252621	EL, 10mfd, 25V
C309	0252523	EL, 30mfd, 16V
C310	0252615	EL, 4.7mfd, 25V
C312	0252811	EL, 1mfd, 50V
C313	0253054	EL, 1000mfd, 16V
C314	0244116	CD, 180pF, ±10%
C315	0244113	CD, 330pF, ±10%
C317	0252806	EL, 0.22mfd, 50V
C401	0248672	CD, 33pF
C402	0244171	CD, 0.01mfd, +80, -20%
C403	0246442	CD, 12pF
C404	0277013	PF, 0.01mfd, ±10%
C405	0252811	EL, 1mfd, 50V
C406	0244171	CD, 0.01mfd, +80, -20%
C407	0252621	EL, 10mfd, 25V
C408	0252811	EL, 1mfd, 50V
C409	0244171	CD, 0.01mfd, +80, -20%
C410	0252531	EL, 100mfd, 16V
C411	0243511	CD, 680pF
C412	0243512	CD, 820pF, ±10%, 500V
C413	0257537	EL, 4.7mfd, 160V
C415	0257535	EL, 1mfd, 160V
C417	0248680	CD, 68pF
C501	0248686	CD, 120pF
C503	0244171	CD, 0.01mfd, +80, -20%
C504	0252621	EL, 10mfd, 25V
C505	0252806	EL, 0.22mfd, 50V
C507	0244171	CD, 0.01mfd, +80, -20%
C508	0246454	CD, 39pF
C509	0246448	CD, 22pF
C510	0246450	CD, 27pF
C511	0277019	PF, 0.033mfd, ±10%
C512	0252621	EL, 10mfd, 25V
C513	0248672	CD, 33pF
C514	0248684	CD, 100pF
C515	0252811	EL, 1mfd, 50V
C517	0244171	CD, 0.01mfd, +80, -20%
C518	0244136	CD, 270pF, ±10%
C519	0244136	CD, 270pF, ±10%
C520	0244136	CD, 270pF, ±10%
C601	0277019	PF, 0.033mfd, ±10%
C602	0253082	EL, 1mfd, 50V
C603	0277019	PF, 0.033mfd, ±10%
C604	0292706	PP, 1mfd, 25V
C605	0253065	EL, 4.7mfd, 25V
C606	0252532	EL, 200mfd, 16V
C607	0253085	EL, 4.7mfd, 50V
C608	0243504	CD, 180pF, ±10%, 500V
C609	0277017	PF, 0.022mfd, ±10%
C610	0244103	CD, 1500pF, ±10%
C611	0252861	EL, 100mfd, 50V
C612	0244565	CD, 4700pF, +100, -0%, 500V
C613	0253084	EL, 3.3mfd, 50V
C701	0253066	EL, 10mfd, 25V
C702	0253066	EL, 10mfd, 25V
C703	0258586	EL, 33mfd, 160V
C705	0253082	EL, 1mfd, 50V
C706	0244111	CD, 6800pF, ±10%
C707	0244136	CD, 270pF, ±10%
⚠C708	0299978	PP, 5600pF, 630V
C709	0277017	PF, 0.022mfd, ±10%
C710	0277021	PF, 0.047mfd, ±10%
C712	0279851	PF, 0.022mfd, ±10%, 100V
C713	0277025	PF, 0.1mfd, ±10%, 200V
C714	0259842	EL, 4.7mfd, AC250V
C715	0253067	EL, 22mfd, 25V
C716	0258590	EL, 22mfd, 160V
⚠C718	0299624	PP, 0.015mfd, ±10%, 630V
⚠C719	0299993	PP, 0.018mfd, ±10%, 630V
⚠C720	0299993	PP, 0.018mfd, ±10%, 630V
⚠C721	0299932	PP, 0.33mfd, ±10% 200V
C722	0253073	EL, 470mfd, 25V
C723	0253067	EL, 22mfd, 25V
C724	0247856	CD, 120pF, ±10%, 500V
⚠C725	0243837	CD, 330pF, ±10%, 2.5KV
⚠C727	0257537	EL, 4.7mfd, 160V
C728	0244501	CD, 1000pF, ±10%, 500V
⚠C901	0279832	PF, 0.1mfd, 125V
⚠C902	0249150	CD, 4700pF, AC125V
C903	0244541	PP, 0.01mfd, ±10%, 500V
C904	0277021	PF, 0.047mfd, ±10%
⚠C905	0258590	EL, 22mfd, 160V
⚠C906	0259976	EL, 470mfd, 200V
C907	0253051	EL, 220mfd, 16V
C908	0258584	EL, 10mfd, 160V

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SYMBOL NO.	PARTS NO.	DESCRIPTION
C0001	0248684	CD, 100pF
C0002	0248684	CD, 100pF
C0003	0253013	EL, 470mfd, 6.3V
C0101	0252615	EL, 4.7mfd, 25V
C0102	0277013	PF, 0.01mfd, ±10%
C0103	0252615	EL, 4.7mfd, 25V
C0104	0248684	CD, 100pF
C0105	0248684	CD, 100pF
C0106	0252332	EL, 200mfd, 10V
C0107	0252615	EL, 4.7mfd, 25V
C0108	0248684	CD, 100pF
C0109	0248684	CD, 100pF
C0110	0252621	EL, 10mfd, 25V
C0111	0252621	EL, 10mfd, 25V
C0112	0252615	EL, 4.7mfd, 25V
C0201	0248668	CD, 22pF
C0202	0252532	EL, 200mfd, 16V
C0203	0277013	PF, 0.01mfd, ±10%
C0204	0248686	CD, 120pF
C0205	0248700	CD, 680pF
C0206	0277029	PF, 0.22mfd, ±10%
C0207	0277029	PF, 0.22mfd, ±10%
C0208	0277033	PF, 0.47mfd, ±10%
C0209	0244139	CD, 1000pF, ±10%
C0210	0244139	CD, 1000pF, ±10%
C0211	0244139	CD, 1000pF, ±10%
C0212	0277019	PF, 0.033mfd, ±10%
C0213	0277021	PF, 0.047mfd, ±10%
C0214	0252811	EL, 1mfd, 50V
C0215	0277011	PF, 0.01mfd, ±10%
C0216	0252615	EL, 4.7mfd, 25V
C0217	0252522	EL, 20mfd, 15V
C0218	0252522	EL, 20mfd, 15V

RESISTORS

SYMBOL NO.	PARTS NO.	DESCRIPTION
R071	0100038	CF, 75ohm, 1/8W
R072	0100017	CF, 10ohm, 1/8W
R073	0100077	CF, 3.3Kohm, 1/8W
R074	0100067	CF, 1.2Kohm, 1/8W
R075	0100025	CF, 22ohm, 1/8W
R076	0100045	CF, 150ohm, 1/8W
R077	0100049	CF, 220ohm, 1/8W
R101	0100073	CF, 2.2Kohm, 1/8W
R102	0100095	CF, 18Kohm, 1/8W
R103	0179539	CC, 360Kohm
R104	0100117	CF, 150Kohm, 1/8W
R105	0100105	CF, 47Kohm, 1/8W
R106	0100103	CF, 39Kohm, 1/8W
R107	0100083	CF, 5.6Kohm, 1/8W
R108	0100109	CF, 68Kohm, 1/8W
R109	0100111	CF, 82Kohm, 1/8W
R110	0100065	CF, 1Kohm, 1/8W
R111	0100067	CF, 1.2Kohm, 1/8W
R112	0100097	CF, 22Kohm, 1/8W
R113	0100105	CF, 47Kohm, 1/8W
R114	0100065	CF, 1Kohm, 1/8W
R115	0100089	CF, 10Kohm, 1/8W
R116	0100081	CF, 4.7Kohm, 1/8W
R118	0100101	CF, 33Kohm, 1/8W
R119	0100079	CF, 3.9Kohm, 1/8W
R121	0100049	CF, 220ohm, 1/8W
R122	0100049	CF, 220ohm, 1/8W
R123	0100053	CF, 330ohm, 1/8W
R124	0100081	CF, 4.7Kohm, 1/8W
R125	0100105	CF, 47Kohm, 1/8W
R201	0100053	CF, 330ohm, 1/8W
R202	0100046	CF, 160ohm, 1/8W
R203	0100131	CF, 560Kohm, 1/8W
R204	0100055	CF, 390ohm, 1/8W
R205	0100087	CF, 8.2Kohm, 1/8W
R206	0150037	VR, 5Kohm-B
R207	0100079	CF, 3.9Kohm, 1/8W
R209	0100067	CF, 1.2Kohm, 1/8W
R210	0100083	CF, 5.6Kohm, 1/8W
R211	0100065	CF, 1Kohm, 1/8W
R212	0100113	CF, 100Kohm, 1/8W
R213	0100116	CF, 130Kohm, 1/8W
R216	0100071	CF, 1.8Kohm, 1/8W
R217	0100050	CF, 240ohm, 1/8W
R218	0100053	CF, 330ohm, 1/8W
R301	0100065	CF, 1Kohm, 1/8W
R302	0100078	CF, 3.6Kohm, 1/8W
R303	0100047	CF, 180ohm, 1/8W
R304	0100048	CF, 200ohm, 1/8W
R305	0150034	VR, 500ohm-B
R306	0100065	CF, 1Kohm, 1/8W
R308	0159704	VR, 10Kohm-B
R309	0100077	CF, 3.3Kohm, 1/8W
R310	0100093	CF, 15Kohm, 1/8W
R312	0159556	VF, 2Kohm-B
R313	0100100	CF, 30Kohm, 1/8W
R314	0100109	CF, 68Kohm, 1/8W
R316	0100089	CF, 10Kohm, 1/8W
R317	0100055	CF, 390ohm, 1/8W
R318	0100099	CF, 27Kohm, 1/8W
R319	0100055	CF, 390ohm, 1/8W
R320	0100091	CF, 12kohm, 1/8W
R321	0100091	CF, 12Kohm, 1/8W
R322	0100061	CF, 680ohm, 1/8W
R323	0100065	CF, 1Kohm, 1/8W
R324	0100091	CF, 12Kohm, 1/8W
R325	0100089	CF, 10Kohm, 1/8W
R326	0100093	CF, 15Kohm, 1/8W
R327	0100041	CF, 100ohm, 1/8W
R330	0100089	CF, 10Kohm, 1/8W
R331	0100087	CF, 8.2Kohm, 1/8W
R332	0100079	CF, 3.9Kohm, 1/8W
R333	0100073	CF, 2.2Kohm, 1/8W
R340	0100068	CF, 1.3Kohm, 1/8W
R401	0100057	CF, 470ohm, 1/8W
R402	0100065	CF, 1Kohm, 1/8W
R403	0100041	CF, 100ohm, 1/8W
R404	0100073	CF, 2.2Kohm, 1/8W
R405	0100063	CF, 820ohm, 1/8W
R406	0110113	OMF, 47ohm, 1W
R411	0100109	CF, 68Kohm, 1/8W
R412	0100061	CF, 680ohm, 1/8W
R413	0110169	OMF, 10Kohm, 1W
R414	0113818	CF, 220ohm, 1/2W
R415	0113818	CF, 220ohm, 1/2W
R416	0100122	CF, 240Kohm, 1/8W
R451	0113725	CF, 100ohm, 1/2W
R501	0100064	CF, 910ohm, 1/8W
R502	0100113	CF, 100Kohm, 1/8W
R503	0100079	CF, 3.9Kohm, 1/8W
R506	0100080	CF, 4.3Kohm, 1/8W
R507	0159704	VR, 10Kohm-B
R510	0100067	CF, 1.2Kohm, 1/8W
R511	0100057	CF, 470ohm, 1/8W
R512	0150040	VR, 50Kohm-B
R513	0100120	CF, 200Kohm, 1/8W
R514	0100062	CF, 750ohm, 1/8W
R515	0100069	CF, 1.5Kohm, 1/8W
R516	0100073	CF, 2.2Kohm, 1/8W
R517	0100084	CF, 6.2Kohm, 1/8W
R519	0100083	CF, 5.6Kohm, 1/8W
R520	0159704	VR, 10Kohm-B
R522	0100065	CF, 1Kohm, 1/8W
R523	0100083	CF, 5.6Kohm, 1/8W
R524	0100079	CF, 3.9Kohm, 1/8W
R525	0100079	CF, 3.9Kohm, 1/8W
R526	0100079	CF, 3.9Kohm, 1/8W
R527	0100053	CF, 330ohm, 1/8W
R528	0100053	CF, 330ohm, 1/8W
R529	0100053	CF, 330ohm, 1/8W
R531	0100079	CF, 3.9Kohm, 1/8W
R532	0100089	CF, 10Kohm, 1/8W
R534	0100133	CF, 680Kohm, 1/8W
R535	0100089	CF, 10Kohm, 1/8W
R601	0100087	CF, 8.2Kohm, 1/8W
R602	0100047	CF, 180ohm, 1/8W
R603	0100088	CF, 9.1Kohm, 1/8W
R604	0100073	CF, 2.2Kohm, 1/8W

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SYMBOL NO.	PARTS NO.	DESCRIPTION
R605	0100097	CF, 22Kohm, 1/8W
R606	0100089	CF, 10Kohm, 1/8W
R607	0100080	CF, 4.3Kohm, 1/8W
R608	0151327	VR, 5Kohm-B
R609	0151279	VR, 200ohm-B
R610	0100047	CF, 180ohm, 1/8W
R611	0114014	CF, 7.5ohm
R612	0100088	CF, 9.1Kohm, 1/8W
R613	0114146	CF, 430ohm
R614	0113762	CF, 3.3Kohm, 1/2W
R615	0113762	CF, 3.3Kohm, 1/2W
R616	0100055	CF, 390ohm, 1/8W
R617	0100051	CF, 270ohm, 1/8W
R618	0114041	CF, 10ohm
R619	0100065	CF, 1Kohm, 1/8W
R620	0114173	CF, 3.3Kohm
R621	0100053	CF, 330ohm, 1/8W
R622	0100041	CF, 100ohm, 1/8W
R623	0100113	CF, 100Kohm, 1/8W
R701	0110367	OMF, 8.3Kohm, 3W
R702	0113785	CF, 27Kohm, 1/2W
R703	0100073	CF, 2.2Kohm, 1/8W
R704	0100033	CF, 47ohm, 1/8W
R705	0100085	CF, 6.8Kohm, 1/8W
R706	0100109	CF, 68Kohm, 1/8W
⚠R707	0150037	VR, 5Kohm-B
⚠R708	0100083	CF, 5.6Kohm, 1/8W
⚠R709	0100083	CF, 5.6Kohm, 1/8W
⚠R711	0113789	CF, 39Kohm, 1/2W
⚠R712	0100085	CF, 9.1Kohm, 1/8W
⚠R713	0100088	CF, 9.1Kohm, 1/8W
R714	0100075	CF, 2.7Kohm, 1/8W
R715	0110365	OMF, 6.8Kohm, 3W
R723	0113737	CF, 330ohm, 1/2W
R724	0114284	CF, 130Kohm
R725	0113774	CF, 10Kohm, 1/2W
R726	0113772	CF, 8.2Kohm, 1/2W
R727	0110109	OMF, 33ohm, 1W
R728	0114147	CF, 470ohm
⚠R731	0119505	FR, 2.2ohm
⚠R732	0119505	FR, 2.2ohm
⚠R733	0119505	FR, 2.2ohm
⚠R734	0119512	FR, 1ohm
R735	0110271	OMF, 12Kohm, 2W
R736	0113791	CF, 47Kohm, 1/2W
R737	0100071	CF, 1.8Kohm, 1/8W
R857	0100047	CF, 180ohm, 1/8W
R858	0100043	CF, 120ohm, 1/8W
R859	0100049	CF, 220ohm, 1/8W
R860	0150001	VR, 200ohm-B
R861	0150001	VR, 200ohm-B
R863	0151716	VR, 5Kohm-B
R864	0151716	VR, 5Kohm-B
R865	0151716	VR, 5Kohm-B
R866	0110271	OMF, 12Kohm, 2W
R867	0110271	OMF, 12Kohm, 2W
R868	0110271	OMF, 12Kohm, 2W
R869	0113768	CF, 2.7Kohm, 1/2W
R870	0113754	CF, 1.5Kohm, 1/2W
R871	0113760	CF, 2.7Kohm, 1/2W
⚠R901	0141072	WW, 2.7ohm, 4W
R902	0110275	OMF, 18Kohm, 2W
R903	0100065	CF, 1Kohm, 1/8W
R904	0100075	CF, 2.7Kohm, 1/8W
R905	0100061	CF, 680ohm, 1/8W
⚠R906	0110345	OMF, 1Kohm, 3W
⚠R906	0110371	OMF, 12Kohm, 3W
⚠R907	0110354	OMF, 2.4Kohm, 3W
R908	0100083	CF, 5.6Kohm, 1/8W
⚠R909	0119514	FR, 10ohm
⚠R910	0119514	FR, 10ohm
⚠R911	0119514	FR, 10ohm
R912	0113778	CF, 15Kohm, 1/2W
R913	0114293	CF, 330Kohm
⚠R914	0119508	RF, 560ohm
R915	0141092	WW, 180ohm, 15W
⚠R916	0119514	FR, 10ohm
⚠R917	0119512	FR, 1ohm
R0001	0100071	CF, 1.8Kohm, 1/8W
R0002	0100027	CF, 27ohm, 1/8W
R0003	0100097	CF, 22Kohm, 1/8W
R0004	0100001	CF, 2.2ohm, 1/8W
R0005	0100001	CF, 2.2ohm, 1/8W
R0101	0100105	CF, 47Kohm, 1/8W
R0102	0100105	CF, 47Kohm, 1/8W
R0103	0150041	VR, 100Kohm-B
R0104	0100057	CF, 470ohm, 1/8W
R0105	0100089	CF, 10Kohm, 1/8W
R0106	0100089	CF, 10Kohm, 1/8W
R0107	0100093	CF, 15Kohm, 1/8W
R0108	0100089	CF, 10Kohm, 1/8W
R0109	0100081	CF, 4.7Kohm, 1/8W
R0110	0100083	CF, 5.6Kohm, 1/8W
R0111	0151255	VR, 20Kohm-B
R0112	0100113	CF, 100Kohm, 1/8W
R0113	0100089	CF, 10Kohm, 1/8W
R0114	0100105	CF, 47Kohm, 1/8W
R0115	0100111	CF, 82Kohm, 1/8W
R0116	0100061	CF, 680ohm, 1/8W
R0117	0100053	CF, 330ohm, 1/8W
R0118	0100097	CF, 22Kohm, 1/8W
R0119	0100051	CF, 270ohm, 1/8W
R0120	0100075	CF, 2.7Kohm, 1/8W
R0201	0114153	CF, 820ohm
R0202	0114153	CF, 820ohm
R0203	0114153	CF, 820ohm
R0204	0114153	CF, 820ohm
R0205	0114153	CF, 820ohm
R0206	0114153	CF, 820ohm
R0207	0114153	CF, 820ohm
R0208	0114153	CF, 820ohm
R0209	0114153	CF, 820ohm
R0210	0114153	CF, 820ohm
R0211	0114153	CF, 820ohm
R0212	0114153	CF, 820ohm
R0213	0100107	CF, 56Kohm, 1/8W
R0214	0100107	CF, 56Kohm, 1/8W
R0215	0100107	CF, 56Kohm, 1/8W
R0216	0100065	CF, 1Kohm, 1/8W
R0217	0100043	CF, 120ohm, 1/8W
R0218	0100075	CF, 2.7Kohm, 1/8W
R0219	0100073	CF, 2.2Kohm, 1/8W
R0220	0151267	VR, 10Kohm
R0221	0100105	CF, 47Kohm, 1/8W
R0222	0100101	CF, 33Kohm, 1/8W
R0223	0100061	CF, 680ohm, 1/8W
R0224	0100087	CF, 8.2Kohm, 1/8W
R0225	0100087	CF, 8.2Kohm, 1/8W
R0226	0100087	CF, 8.2Kohm, 1/8W
R0227	0100081	CF, 4.7Kohm, 1/8W
R0228	0100083	CF, 5.6Kohm, 1/8W
R0229	0100081	CF, 4.7Kohm, 1/8W
R0230	0100083	CF, 5.6Kohm, 1/8W
R0231	0100081	CF, 4.7Kohm, 1/8W
R0232	0100083	CF, 5.6Kohm, 1/8W
R0233	0100081	CF, 4.7Kohm, 1/8W
R0234	0100083	CF, 5.6Kohm, 1/8W
R0235	0100089	CF, 10Kohm, 1/8W
R0236	0100081	CF, 4.7Kohm, 1/8W
R0237	0100083	CF, 5.6Kohm, 1/8W
R0238	0100081	CF, 4.7Kohm, 1/8W
R0239	0100093	CF, 15Kohm, 1/8W
R0240	0100093	CF, 15Kohm, 1/8W
R0241	0100105	CF, 47Kohm, 1/8W
R0242	0100075	CF, 2.7Kohm, 1/8W
R0244	0100089	CF, 10Kohm, 1/8W
R0245	0100073	CF, 2.2Kohm, 1/8W
R0246	0100107	CF, 56Kohm, 1/8W
R0247	0100069	CF, 1.5Kohm, 1/8W
R0248	0100081	CF, 4.7Kohm, 1/8W
R0249	0151255	VR, 20Kohm-B
R0250	0100113	CF, 100Kohm, 1/8W
R0251	0100061	CF, 680ohm, 1/8W
R0252	0100053	CF, 330ohm, 1/8W
R0253	0100097	CF, 22Kohm, 1/8W
R0254	0100097	CF, 22Kohm, 1/8W
R0255	0100051	CF, 270ohm, 1/8W
R0256	0100065	CF, 1Kohm, 1/8W
R0257	0100035	CF, 56ohm, 1/8W

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SYMBOL NO.	PARTS NO.	DESCRIPTION
SEMICONDUCTOR		
D101	2330351	1S2076
D102	2330351	1S2076
D103	2330351	1S2076
D104	2330351	1S2076
D105	2330351	1S2076
D106	2330351	1S2076
D301	2330351	1S2076
D302	2330351	1S2076
D303	2330351	1S2076
D401	2330351	1S2076
D601	2330351	1S2076
D602	2330351	1S2076
D701	2330352	1S2076A
D702	2332141	RH-1Z
D703	2330564	V11N
D704	2332851	EH-1Z
⚠D705	2332251	RH-1S
⚠D706	2332851	EH-1Z
⚠D901	2333231	RM10B
⚠D902	2330251	V06C
⚠D903	2330253	V06G
D0001	2332891	SE303A
D0002	2332891	SE303A
D0101	2332431	PH-302
D0103	2330351	1S2076
D0201	2332031	SLR-53URT
D0202	2332031	SLR-53URT
D0203	2332031	SLR-53URT
D0204	2332031	SLR-53URT
D0205	2332031	SLR-53URT
D0206	2332031	SLR-53URT
D0207	2332031	SLR-53URT
D0208	2332031	SLR-53URT
D0209	2332031	SLR-53URT
D0210	2332031	SLR-53URT
D0211	2332031	SLR-53URT
D0212	2332031	SLR-53URT
D0213	2330351	1S2076
D0214	2332032	SLR-53GG
D0215	2332031	SLR-53URT
D0216	2330351	1S2076
D0217	2330351	1S2076
D0218	2330351	1S2076
D0219	2330351	1S2076
D0220	2330351	1S2076
D0221	2330351	1S2076
D0222	2330351	1S2076
D0223	2330351	1S2076
D0224	2330351	1S2076
Q071	2320143	2SC717TM
Q101	2322191	2SC1740 (R)
Q102	0573480	2SC458 (B)
Q103	0573480	2SC458 (B)
Q104	0573480	2SC458 (B)
Q201	0573480	2SC458 (B)
Q305	0573480	2SC458 (B)
Q306	2320637	2SA673 (C)/(D)
Q307	0573480	2SC458 (B)
Q308	0573480	2SC458 (B)
Q401	2322562	2SC2688 (K)/(L)
Q402	2322562	2SC2688 (K)/(L)
Q601	2321306	2SD401/401A
Q602	2321306	2SD401/401A
Q701	2321992	2SC2271 (M)/(N)
⚠Q702	2323021	2SD898 (B)
Q704	2323432	2SC1983(R)/(O)/(Q)
Q851	2322561	2SC2688 (K)/(L)/(M)/(N)
Q852	2322561	2SC2688 (K)/(L)/(M)/(N)
Q853	2322561	2SC2688 (K)/(L)/(M)/(N)
⚠Q901	2322163	TF320M-AZ
⚠Q902	2321992	2SC2271 (M)/(N)
Q0001	2320644	2SC1213 (D)
Q0002	2321984	2SC2060 (R)
Q0101	0573480	2SC458 (B)
Q0102	0573480	2SC458 (B)
Q0103	2320644	2SC1213 (D)
Q0104	0573480	2SC458 (B)
Q0105	0573480	2SC458 (B)
Q0201	2320663	2SC1213AC
Q0202	2320637	2SA673 (C)/(D)
Q0203	2320637	2SA673 (C)/(D)
Q0204	2320637	2SA673 (C)/(D)
Q0205	0573480	2SC458 (B)
Q0206	0573480	2SC458 (B)
Q0207	0573480	2SC458 (B)
Q0208	0573480	2SC458 (B)
Q0209	0573480	2SC458 (B)
Q0210	0573480	2SC458 (B)
Q0211	0573480	2SC458 (B)
ZD101	2330631	HZ-7 (A)
ZD701	2331161	HZ-11 (A)/(B)/(C)
ZD702	2334282	RD24EB1
ZD703	2331843	HZ-12 (A3)
⚠ZD704	2332841	HZ-11C2L
ZD705	2331161	HZ-11 (A)/(B)/(C)
ZD706	2331154	HZ-12 (A)/(B)/(C)
⚠ZD901	2331842	HZ-12 (A2)
ZD0101	2331815	HZ-7 (B)
ZD0201	2331084	UPC-574J (AG)
IC201	2366151	M51355P
IC501	2365061	HA11436
⚠IC701	2364181	HA11423
⚠IC901	2366201	STR3035
IC0001	2364871	M5848P
IC0101	2365531	HD44042
IC0102	2366171	M58487AP
IC0201	2364271	HD38986
IC0202	2360672	M5R-1400P

SYMBOL NO.	PARTS NO.	DESCRIPTION
COIL/TRANSFORMER		
L071	2141776	Filter coil
L072	2122253	Filter coil
L201	2162981	Fixed coil
L202	2142661	Mold I.F.T.
L203	2122298	LA axial coil
L204	2142015	Mold IF coil
L205	2142015	Mold IF coil
L206	2121703	Peaking coil
L208	2121693	Peaking coil
L209	2122253	Filter coil
L210	2120482	Filter coil
L304	2121699	Peaking coil
L305	2121704	Peaking coil
L401	2122251	Filter coil
L402	2122253	Filter coil
L501	2122238	LA axial coil
L502	2122238	LA axial coil
L503	2122238	LA axial coil
L701	2122091	Filter coil
⚠L901	2122711	Line filter
⚠L902	2162412	Degaussing coil
⚠L903	2120483	Filter coil
⚠L904	2120483	Filter coil
⚠L905	2120483	Filter coil
L0101	2121706	Peaking coil
L0201	2121706	Peaking coil
⚠T401	2250451	Sound output trans
T501	2141619	Bandpass trans
⚠T701	2260021	H. drive trans.
⚠T702	2433171	F.B.T.

PRODUCT SAFETY NOTE: Components marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully, the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

SYMBOL NO.	PARTS NO.	DESCRIPTION
MISCELLANEOUS		
CP201	2300073	SAW filter HW2063
CP401	2142671	M10-H mold IFT
MF201	2142241	Ceramic filter
MF401	2142601	Ceramic filter
M0001	2790751	Ceramic filter CSB-500E
M0101	2790321	Ceramic filter CSB-455A/C
M0102	2790751	Ceramic filter CSB-500E
⚠ TH901	2340263	Thermistor
⚠ F901	2720587	Fuse 4A
DL301	2162991	Delay line
J451	2670751	Earphone jack
SP451	2410682	Speaker 77MM
S0201	2620611	Slide switch
S0202	2630631	Switch-key
S0203	2630631	Switch-key
S0204	2630631	Switch-key
S0205	2630631	Switch-key
S0206	2630631	Switch-key
S0207	2631721	Key switch
S0208	2631721	Key switch
S501	2630582	Push switch
⚠ S901	2610661	Rotary power switch
⚠ V1	2352371	CRT 370 HRB22
X501	2790442	Crystal
	2423456	Tuner ET-341
⚠	2441311	Deflection yoke
	2582011	R/C transmitter CLU-610
	2658893	CPT socket
	2687562	ULCSA Antenna Box
	2687951	VHF adaptor
	2730063	Earphone
	2742553	AC cord
	2750011	Telescopic antenna
	2760524	Loop antenna
	2771891	Ferrite beads core 003
	2781282	Bead band
	2782611	Center pin
	3227981	Frame Ass'y (CT1324)
	3227983	Frame Ass'y (CT1326)
	3227985	Frame Ass'y (CT13X6)
	3262441	Knob APS
	3263391	Knob VR
	3264861	Knob main ass'y
	3328794	Antenna terminal board ass'y
	3330941	Earth spring
	3455312	Back cover
	3719342	Canoe rivet
	3736072	Hinge
	3738902	Transistor bush
	3746191	M driver
	3771431	Knob channel ~~(A)~~ (down)
	3771441	Knob channel ~~(B)~~ (UP)
	3771451	Knob vol. ~~(A)~~ (down)
	3771461	Knob vol. ~~(B)~~ (UP)
	3771501	Knob preset
	3771521	Knob Power (CT1324)
	3772211	Door Ass'y (CT1324)
	3772213	Door ass'y (CT1326/13X6)
	3772461	Remote control case ~~(A)~~ (top)
	3772471	Remote control case ~~(B)~~ (bottom)
	3772481	Battery cover for R/C transmitter
	3772621	Remote control filter
	3772731	Case for R/C transmitter
	4257181	Battery terminal ~~(A)~~ (for ⊕ and ⊖)
	4257182	Battery terminal ~~(B)~~ (for ⊖)
	4257183	Battery terminal ~~(C)~~ (for ⊕)
V	4259301	Channel number sheet
	4614791	Wedge
	4616171	Knob push for R/C transmitter
	2825031B	POWER SWITCH P.W. BOARD
	2825031C	TUNER P.W. BOARD

CT1324/CT1326
CT13X6

HITACHI PARTS ORDERING INFORIMATION

To receive original replacement parts, please contact your nearest HITACHI Parts Distributor or contact Hitachi Central Parts Warehouse listed below. Be sure to indicate part catalog number, part description and model number (located on back of product).

THE ELECTRONIC DISTRIBUTION CO.
1509 E. Del. Amo Blvd. Carson, CA. 90746
Phone #213-639-4120

TEL-VIDEO CORPORATION
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Phone #305-693-2921

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Phone #617-522-9330

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Phone #214-231-1826

HARCO ELECTRONICS, INC.
Carsin Run Aberdeen, MD. 21001
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HITACHI SERVICE MANUALS

To order HITACHI Service Manuals contact:
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For imformation concerning repairs, operation or technical assistance, please contact the Service Manager of the nearest Hitachi Regional Office, Service Division listed:

Southern Regional Office
510 Plaza Dr. College Park, GA 30349
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Phone #312-593-1550

Eastern Regional Office
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Phone #201-935-8980

Western Regional Office
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Phone #213-537-8383

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Printed in Japan YF-S(F)

CT1324/CT1326/CT13X6-511 YK No.806E YOKOHAMA
NP82SX Chassis